

REMARKS

Claims 1-6 and 8-21 are pending in this application. By this Amendment, claims 1, 3, 6, 8, 9, 11-15, 17 and 18 are amended, claims 20 and 21 are added, and claim 7 is canceled without prejudice to or disclaimer of the subject matter recited therein. No new matter is added. Reconsideration of this application in view of the above amendments and the following remarks is respectfully requested.

I. Objection to Claim 3

The Office Action objects to claim 3 because of a typographical error. Claim 3 is amended to obviate the objection.

II. 35 U.S.C. §112 Rejection

The Office Action rejects claims 3, 6, 7, 12, 14, 15, 17 and 18 under 35 U.S.C. §112, second paragraph. The rejection of canceled claim 7 is moot. The rejection of the remaining claims is obviated by the above amendments.

III. 35 U.S.C. §102(b) Rejection

The Office Action rejects claims 1, 9-12 and 15 under 35 U.S.C. §102(b) over Takao et al. ("Takao"), JP-A-08-322667. The rejection is respectfully traversed.

Takao fails to disclose a scroll compressor that includes seal means provided at least partially inside a groove of an orbiting scroll, and that the seal means is provided for sealing compression chambers formed between the orbiting scroll and fixed scrolls from an orbiting bearing provided at a main shaft side of the orbiting scroll and from main shaft bearings provided between the fixed scrolls and the main shaft, as recited in independent claims 1 and 9.

Takao discloses a scroll type compressor having a turning scroll 6 provided between fixed scrolls 4 and 5 to form compression chambers 16, 17 (see Fig. 8).

Takao discloses that seal means 43, 44 are provided on an upper and lower surface of the turning scroll 6 (see Fig. 8 and paragraph [0030] of the computer generated translation). However, as clearly shown in Fig. 8, turning scroll 6 does not have a groove into which the seal means 43, 44 are at least partially inserted. Thus, Takao fails to disclose a scroll compressor that includes seal means provided at least partially inside a groove of an orbiting scroll, as recited in independent claims 1 and 9. Therefore, independent claims 1 and 9 are patentable over Takao for at least this reason.

Further, Applications respectfully disagree with the Office Action that the features of claim 7, which are now recited in claim 1, would have been obvious over the combination of Takao in view of Suefuji et al. ("Suefuji"), JP-A-08-170592. Takao's seal means 43, 44 simply prevent the compressed fluid from leaking out from between the turning scroll 6 and fixed scrolls 4 and 5 (see paragraph [0030]). Seal means 43, 44 do not seal compression chambers 16, 17 from an orbiting bearing provided at a main shaft side of the turning scroll 6 and from main shaft bearings provided between the fixed scrolls 4, 5 and the clamp shaft 8 (allegedly correspond to the claimed main shaft). Thus, Takao fails to disclose that seal means is provided for sealing compression chambers from an orbiting bearing provided at a main shaft side of the orbiting scroll and from main shaft bearings provided between the fixed scrolls and the main shaft, as recited in independent claims 1 and 9. Suefuji fails to overcome the deficiencies of Takao, and is only cited as allegedly disclosing a main shaft bearing provided between fixed scrolls and a main shaft. Therefore, independent claims 1 and 9 are patentable over Takao, even in combination with Suefuji, for at least this additional reason.

Because claims 10-12 and 15 incorporate the features of independent claim 9, these claims also are patentable over Takao for at least this reason, as well as for the additional features these claims recite. Thus, it is respectfully requested that the rejection be withdrawn.

IV. 35 U.S.C. §103(a) Rejections

Claims 2-6, 8, 13, 14 and 16-19 incorporate the features of claims 1 and 9, respectively. Further, none of the other applied references overcomes the deficiencies of Takao. For example, the seal rings 11 and 12 disclosed by Uchida et al. ("Uchida"), U.S. Patent Application Publication No. 2003/0000238 A1, simply prevent leakage of a high pressure fluid from a backpressure chamber (see Abstract and paragraph [0069]). The seal rings 11 and 12 do not seal any compression chambers (e.g., working chambers 9) from scroll bearing 16 provided at a main shaft side of scroll 6 and from any main shaft bearings provided between fixed scroll 8 and shaft 1. Therefore, the dependent claims also are patentable over the applied references for at least these reasons, as well as for the additional features these claims recite. Thus, it is respectfully requested that the rejections of these claims be withdrawn.

V. Claims 20 and 21

New claims 20 and 21 are presented for consideration and respectively recite that the seal means is actuated by a pressure exerted on the seal means by a lubricating oil, and that the pressure is exerted on two surfaces of the seal means. None of the applied references discloses these features. Thus, claims 20 and 21 also are patentable over the applied references for at least this reason, as well as for their dependency from independent claim 1.

VI. Conclusion

In view of the above, early and favorable action concerning this application is respectfully requested.

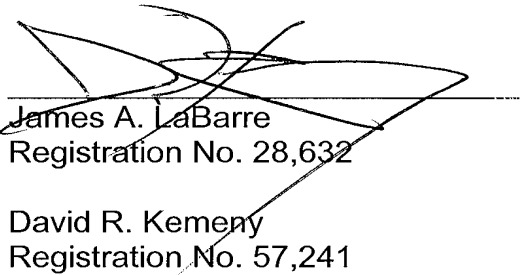
Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application, the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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